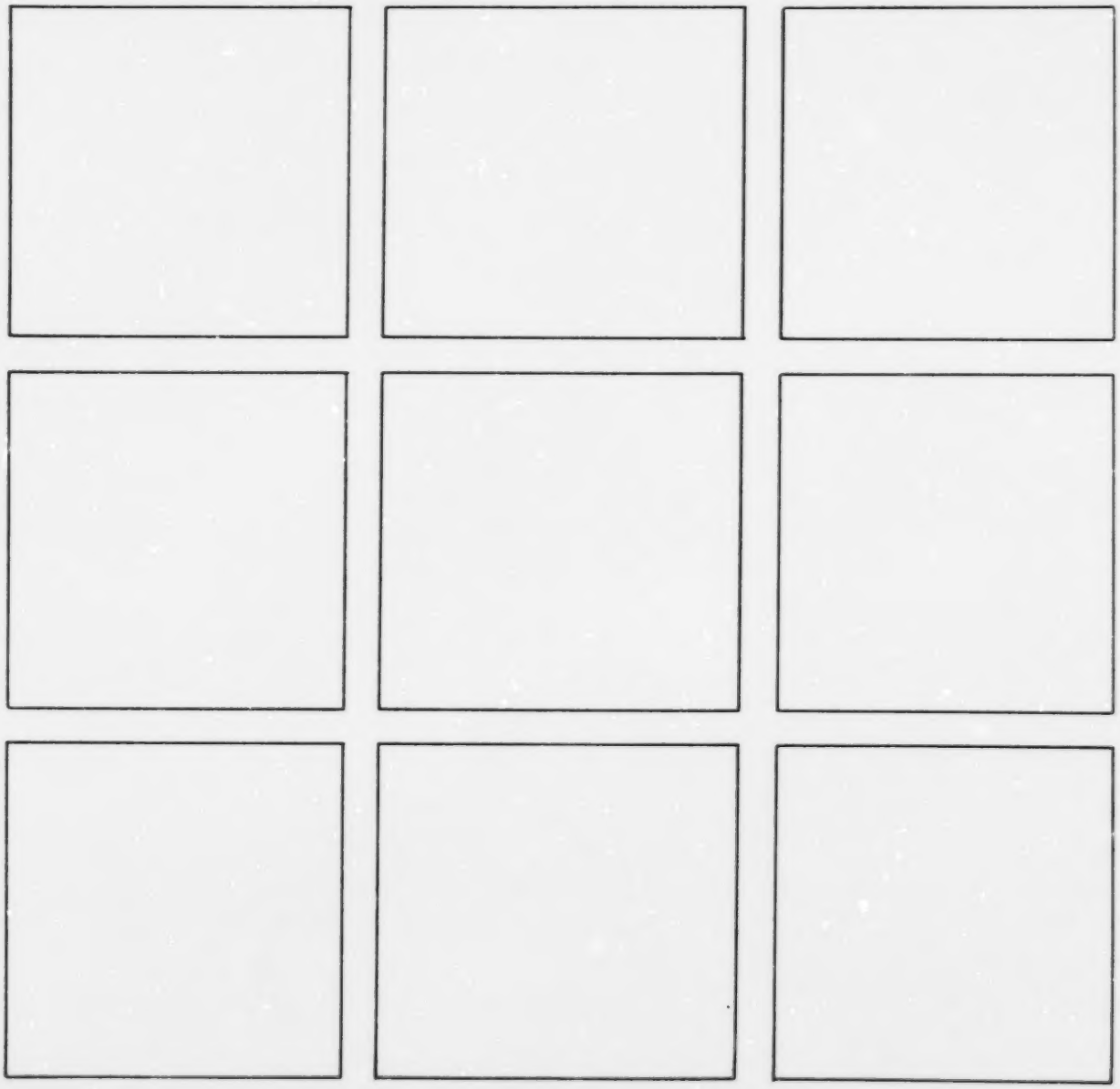
OWMC

Ontario
Waste Management
Corporation
System
Development
Project

The Proctor & Redfern Group

# Primary Information—

# Land Use



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Dear Sir

Land Use - Primary
Information Study

We are pleased to present the final report of the Land Use - Primary Information.

This report identifies in a general or broad brush fashion the land use factors in Southern Ontario as they relate to the facilities development process and draws some preliminary conclusions, assisting in the selection of the appropriate facilities system.

Yours very truly

Proctor & Redfern Limited

W. D. Goodings
Vice-President

WDG:sm
Encl.

# LAND USE - PRIMARY INFORMATION

## OWMC FACILITIES DEVELOPMENT PROCESS

ONTARIO WASTE MANAGEMENT CORPORATION

August, 1982

Proctor & Redfern Limited
75 Eglinton Avenue East
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ONTARIO WASTE MANAGEMENT CORPORATION

BACKGROUND INFORMATION

The Ontario Waste Management Corporation (OWMC) is a provincial crown agency created in 1981 by the Ontario government to establish a liquid industrial waste and hazardous waste management system for the province. One of the first tasks of the Corporation was to examine the possibility of constructing a treatment and disposal facility at South Cayuga in the Regional Municipality of Haldimand-Norfolk. Preliminary hydrogeological studies of the site revealed that it had several short-comings and the Board of Directors of OWMC voted unanimously to reject the site in November 1981.

Following the rejection of the South Cayuga site, OWMC developed a corporate plan which incorporated:

- The need to design and build a waste treatment and disposal system to manage safely liquid industrial waste and hazardous waste not presently receiving adequate treatment and disposal in Ontario.

- The need to assist Ontario industries in identifying additional, practical ways to reduce and/or recycle liquid industrial waste and hazardous waste.

- The need to consult with the public on the nature and scope of the industrial waste problem and how it can be remedied.

Before a treatment and disposal facility is built, detailed proposals must be presented to an independent Hearing Panel appointed by the Ontario Government, and public hearings will be held.

OWMC is not a regulatory agency, nor is it responsible for treating and disposing of domestic or radioactive wastes.

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# 1.0 INTRODUCTION

As part of the collection of background data for the waste management facilities development process, a considerable inventory of land use related factors has been assembled. This inventory represents a data bank from which the impacts that may be expected from a proposed facility can be determined.

The information is also useful as a basis to identify broad brush characteristics that will be encountered in any particular area. The presentation of these characteristics is best approached at the general level by dividing southern Ontario into a number of broad regions within each of which there are sets of characteristics that bear on questions of site selection in related ways.

The purpose of this report is to summarize the characteristics of each region, relate them to the facilities development process and draw the relevant conclusions for assisting in the selection of the appropriate facilities system.

## 2.0 CONCLUSIONS

This preliminary review of land use is not a complete evaluation but is part of the continuing input of land use analysis to the process of finding sites for waste management facilities. The review does however indicate the following provisional conclusions.

1. Land use is unlikely to be a determinative factor for site selection but will probably be secondary to more basic determinants such as ground conditions, transportation and where the waste is actually being generated.

2. Certain areas or zones* in Southern Ontario have land use characteristics which are less likely to recommend themselves as having potential places for the location of a facility and these include the Canadian Shield (Zone 18) and some of the more agricultural or recreation based zones (Zones 3, 4, 5, 14 and 15) in the west and along the southern boundary of the shield.

3. Certain zones identified have land use characteristics which are more likely to recommend themselves as having potential places for the location of a facility and these include Eastern Ontario (Zones 16 and 17), the Golden Horseshoe (Zones 7, 11 and 12) Southern Niagara (Zone 9) and areas on the main east-west transportation axis (Hwy. 401), (Zones 1, 2 and 6), between Windsor and the Golden Horseshoe.

4. Detailed land use analyses of existing development patterns and proposed development in approved planning documents, will be an increasing input into the site selection process, as candidate areas are more clearly identified.

*For Zone location refer to map on page 42.

## 3.0 DETAILED APPROACH

It is evident from the broad brush considerations that few if any land use factors will be wholly exclusive for either the choice of a system or the location of a facility. Apart from the obvious desirability of avoiding major recreation features, residential areas etc. it is unlikely that land use and character will be determinative in themselves. Rather, they will be one of a series of factors which will be weighed together to produce an optimum choice.

Detailed land use analyses are unlikely to be needed in the choice of the system but will be very important for the location of specific facilities. Thus a more detailed approach will be valid at a later stage in the facilities development process. It must be recognized however, that some iteration between the choice of a system and the location of facilities is likely and that some further level of detail beyond this report may be required to assist that iteration. The necessary data for this exists in the inventory.

## 4.0 FACTORS CONSIDERED

**URBAN AREAS.** These pose advantages and disadvantages for siting in that they most frequently contain residential and other areas where physical avoidance may be desirable. On the other hand, they may also contain existing industrial areas and servicing capabilities needed for facilities and, particularly in the Golden Horseshoe regions (Zones 6, 7, 9, 11 and 12), many of the generators of waste.

**INDUSTRIAL PARKS.** These may provide candidate sites for facilities and the existence of these will be a useful guide. Existing vacant acreage and servicing have been noted as key information.

**SPECIAL AREAS.** These include important scenic, recreation, natural, farming and conservation areas which might entail difficulties if sites were considered in proximity to them.

**INDIAN RESERVES.** All Indian Reserves are included in order that jurisdiction may be taken into account.

**ASSOCIATED FACILITIES.** These include existing landfill sites, sludge farms, incinerators, hazardous waste transfer stations, pollution control plants, reclaimers of waste, etc. where the existing waste treatment/disposal facility may be significant for the siting of additional or new facilities. Details of these facilities, location functions etc. are given in Appendix F of the Waste Quantities Study.

**OTHER FACTORS.** These include important public installations and land holdings together with major sand and gravel pits. Airports have been included since landfill sites and incinerators located in the vicinity of airports may pose a hazard.

## 5.0 REGIONAL CHARACTERISTICS

The following summary of the salient characteristics of broad regions or zones in southern Ontario is provided here as a background for identifying areas which may become candidates for further detailed studies. Additional information for each zone is readily available where required. The zones are shown on page 42. Each zone is denoted by a number. The term zone has been used to avoid any identification with regional municipalities and the boundaries are considered broad and flexible. Each zone has a characteristic or characteristics which make it unique. A zone may be an important recreational area, a special agricultural area or an area which is primarily urban.

The prime purpose of introducing zones is for convenience at this time and to provide a basis for evaluating or comparing land use.

### Zone 1

Zone 1 consists of the extreme southwestern part of the province. It contains three major urban centres, Windsor, Chatham and Sarnia, each of which has a major industrial component to its land use. These three centres contain 53% of the population and provide major employment for their own and a substantial surrounding population. Another 14% is located in smaller centres which have minor employment functions. The remaining population is mainly low density rural and agricultural. Windsor and Chatham are mainly manufacturing centres oriented to the automobile, trucking and agricultural industries, while Sarnia is heavily oriented to the petrochemical industry. The urban centres provide a number of industrial parks with serviced lands. A total of 7,100 acres of vacant land is available south of Sarnia and 1,700 acres in the Windsor area.

The zone contains several prominent natural and recreation features including the Point Pelee National Park and several provincial parks along its lake shores. The St. Clair Parkway Commission operates a liner parkway along the St. Clair River

and there are several conservation areas particularly in the northern part. But Point Pelee and the Pinery Provincial Park are of special significance for wildlife, rare plants and natural land forms. In addition, the whole area is on one of the major flyways for North American waterfowl and contain sanctuary and breeding grounds, many of which take the form of wetlands.

The zone is an important farming area with a concentration on grains and cash crops. Much of the soil is in Classes 1 and 2 of the Canada Land Inventory (CLI) and along the shores of Lake Erie are important fruit growing, greenhouse and market gardening sections. Among the special features, there is a major Indian Reserve on Walpole Island and two smaller ones towards the zone centre; a number of sand and gravel pits particularly in the south, and east of Sarnia; and a major pipeline, rail and highway corridors through the urban centres running east.

Existing waste treatment/disposal facilities located in this zone include one incinerator, one landfill, two sludge farms, four reclaimers and one private treatment plant. The zone also contains a significant number of parcels of government owned land including two experimental farms. The major centres have airports, that at Windsor being a main federal airport, and very good transportation access to most of the other parts of the province.

**Zone 2**

This zone encompasses Middlesex and Oxford counties and extends south to Lake Erie to include most of Elgin County.

Two major urban centres are located in this zone, London and Woodstock. These centres, particularly London, dominate the area and provide the location for a significant portion of the manufacturing employment. They contain 70% of the population; another 7.5% is located in smaller places which serve as social and commercial centres for the rural areas. The remaining population is largely rural agricultural. London and Woodstock have well-diversified and mainly service economies with no particular specialization in industries. Industries in the zone, as a whole, are largely associated with agriculture, including meat packers, cheese makers, dairy and feed mill operators.

Twenty-six industrial parks are located in the major and smaller urban centres with 1,700 acres of vacant, serviced land available, most of which is located in Strathroy and Woodstock.

Several natural and recreational areas are contained in the zone. There are a number of conservation areas, particularly in the vicinity of London and Woodstock. A wildlife management area is located in the southeastern portion of the zone.

The zone contains good farming country with mixed farming practically throughout. Much of the soil is in Class 1 of the CLI with some Class 2 soil found in the western and southwestern sections of the zone. Dairy farming predominates in much of the eastern section.

Among the special features is a major Indian Reserve located southwest of London. Sand and gravel pits are concentrated in the vicinity of Woodstock, London and the northwest. Major pipeline, rail and highway corridors run through the urban centres providing them with excellent linkage with the east and west.

The zone contains numerous parcels of government owned land including a military area north of London.

**Zone 3**

Zone 3 consists of the area bordering Lake Erie from Port Stanley to Port Dover northward almost to Brantford. It contains several urban centres, of which St. Thomas, Tillsonburg, Nanticoke and Simcoe are the largest. These four centres contain 40% of the population. Another 8.5% are located in smaller centres and the remaining population in villages and rural townships. St. Thomas dominates as the major employment centre, with automobile machinery and machinery related industries as the primary manufacturing establishments. The other urban centres, Aylmer, Delhi, Tillsonburg and Simcoe, have agriculturally related industries including feed mills, tobacco processing, and dairy operators. Industrial development has occurred on the Lakeshore in the Nanticoke area, with the establishment of Stelco's steel refinery, the new Texaco plant and the Hydro generating station.

Some 732 acres of serviced industrial parkland is available in the urban centres with 250 acres located in St. Thomas and 180 acres in Nanticoke.

Some 732 acres of serviced industrial parkland is available in the urban centres with 250 acres located in St. Thomas and 180 acres in Nanticoke.

This zone contains an important tobacco growing area. Corn, and some fruits and vegetables are grown and dairy cattle and livestock are raised. The soils of the zone are predominantly Class 2 as identified by the CLI with some pockets of Class 1 located throughout the zone.

Among the special features found in the zone, are sand and gravel pits concentrated around St. Thomas, Tillsonberg, Delhi and between Simcoe and Port Dover. The federal government owns two experimental farms near Simcoe and Delhi.

**Zone 4**

Zone 4 consists of the area bordering Lake Huron as far north as Kincardine and east to include Stratford and Listowel. It contains one major urban centre, Stratford in the east and a smaller centre, Goderich on Lake Huron. The population of these two towns represents 30% of the total population. Another 17% of the population resides in smaller towns and villages. The zone is predominantly a rural and agricultural area.

A total of 1,500 acres of vacant serviced land is available in industrial parks in the urban areas with 790 acres located in Goderich and 132 acres in Stratford.

One wildlife management area is located east of Clinton where waterfowl including pheasants, Canada Geese, hawks and other migrating birds can be viewed.

The zone contains good soils for agriculture with most of the soils being identified as Class 1 by the CLI. Pockets of Class 2 soils occur along Lake Huron and west of Stratford. Mixed farming is produced by the farming community.

Special features in the area include sand and gravel pits which are concentrated in the southern portion of the zone.

**Zone 5**

Zone 5 consists of the Bruce Peninsula, the area immediatly south bordering Lake Huron and the area fronting Georgian Bay to Midland and Penetanguishene. The zone contains several subregions. The agricultural area south of the Bruce Peninsula and adjacent to Georgian Bay, the Bruce Peninsula and the recreational area of Georgian Bay. No one major centre dominates the zone. The largest urban centres are Owen Sound and Midland and are considerably smaller than those in zones to the south. In these two centres 23.5% of the zone's population reside, another 21.0% of the population live in smaller towns and villages. The zone is predominantly low density urban and rural in nature with more than half of the population living outside of urban areas.

Owen Sound functions as the commercial and service centre for the western section of the zone. The town's industries include manufacturing of television picture tubes, tools and dies and steel tubes. Other urban centres in this area provide services for farmers or are locations of small manufacturers such as furniture and agricultural product industries.

Vacant serviced land is available in a number of the urban centres in this zone. Owen Sound offers 1,100 acres of land, Wasaga Beach, 327 acres, Midland, 22 acres, and Walkerton, 200 acres.

Several significant features contribute to this zone's importance as a recreation area. Notable is the Niagara Escarpment which extends from the tip of the Bruce Peninsula along Georgian Bay and south of Collingwood. The Bruce Trail follows the Escarpment. Several Provincial Parks and conservation areas are located along the shores of Lake Huron and Georgian Bay. Part of Georgian Bay Islands National Park is situation off the top of the Bruce Peninsula. Numerous ski areas are found in the north-central part of the zone.

The zone contains wildlife management areas, several of which are located in the Bruce Peninsula. A large area is found at the south tip of Georgian Bay in the vicinity of Thornbury and the well-known Wye Marsh is located near Midland. A number of major wetland areas are located in the zone. Most are in the Bruce

Peninsula and Lake Huron vicinities although one wetland area is located north of Camp Borden.

Agricultural capability varies within the zone. The Bruce Peninsula, being a rugged area, contains soil of little or no capability for agriculture. To the south of the Peninsula, however, large areas of Class 1 and Class 2 soils can be found on which crops are grown and cattle raised. The area is considered the centre of beef raising in Ontario. To the east of this area, the soils are of limited agricultural capability and are suitable for raising livestock. Stretching from Meaford to Collingwood is an area well-known for its apples. The northeastern section of the zone is primarily devoted to mixed farming.

Special features of the area include a number of Indian Reserves in the Bruce Peninsula, and on Christian Island and two other adjacent islands in Georgian Bay. Sand and gravel pits are concentrated in the Bruce Peninsula and Penetanguishene-Midland area.

The water pollution control plant in Midland handles inert industrial sludges.

Well over 100 properties greater than 25 acres are owned by the Province in the zone, many of which are Ontario Hydro surplus lands located in the eastern section. The Department of National Defence owns properties in the vicinity of the southern tip of Georgian Bay.

**Zone 6**

Zone 6 is situated in central southwestern Ontario. The four main urban centres, Kitchener-Waterloo, Cambridge, Guelph and Brantford, contain 85% of the population. The remaining portion of the zone is rural. The urban centres have well diversified industrial bases.

A total of 1,700 acres of vacant serviced land is available in the industrial parks of the zone's urban centres. Over 400 acres is available in each of Cambridge, Brantford, and Guelph.

A number of sizeable conservation areas are located in the north and central portion. The wildlife management areas in the zone are situated near Cambridge.

The soils are primarily identified as Class 1 by the CLI. Agriculture dominates the northeastern section of the zone to a greater extent than the remainder area. Mixed farming is the dominant agricultural activity.

Concentrations of sand and gravel pits are found west of Brantford as well as in the vicinity of the other three main urban centres.

Existing industrial waste disposal facilities include a landfill at each of Brantford, Paris and Guelph. Transfer stations are situated in the Waterloo, Brantford and Guelph areas. Reclaimers and reusers of liquid waste are located in the Kitchener-Waterloo area and in Brantford. The Kitchener Waterloo Treatment plant handles inert industrial sludges.

Government owned lands include an agricultural research area west of Kitchener and a federal reformatory near Guelph. Two vacant provincial properties are located in the zone, along with some Ontario Hydro surplus land.

Excellent transportation links with the "Golden Horseshoe" area and southwestern Ontario are provided by rail and Highway 401.

**Zone 7**

Zone 7 is situated at the western tip of Lake Ontario and contains the cities of Hamilton and Burlington as well as a number of smaller centres - Dundas, Ancaster, Stoney Creek and Waterdown. Hamilton is the dominant centre of the zone; the population of the City and Burlington represent 80% of the total population, smaller centres contain another 13%. The remaining portion of the zone is rural in character containing villages and agricultural lands.

Vacant serviced land is provided in Burlington and Hamilton industrial parks -4,000 acres in Burlington and 3,000 acres in Hamilton.

The Niagara Escarpment passes through the zone and provides excellent recreational opportunities. One conservation area is located in the zone, south of Stoney Creek and a wildlife management area is situated at the edge of the escarpment to the northwest of Hamilton.

Soil in the zone is primarily Class 1 south and east of Hamilton and north of Burlington. Class 2 land is located west and north of Hamilton. Crops and fruits are grown. Poorer soils exist in the northeast section of the zone.

A landfill site receiving inert sludges is just south of Hamilton; Hamilton has a water pollution control plant receiving wastes as well as one private reclaimer.

Good road and rail links exist to the Niagara Peninsula, Toronto and eastern Ontario and southwestern Ontario.

**Zone 8**

Zone 8 is the area between Lake Ontario and the Niagara Escarpment, extending from the Niagara River to Grimsby. The major urban centre is the City of St. Catharines. Others include Niagara-on-the-Lake, Thorold and Lincoln, all which include rural areas within their municipal boundaries.

The industrial base of the zone is well diversified. Dominant industries in St. Catharines are automotive parts and paper products manufacturers.

Vacant serviced land is available in a number of industrial parks. St. Catharines-Thorold offer 2,800 acres. Five hundred and twenty acres are available in Niagara-on-the-Lake.

Several notable recreation and natural areas are found within the zone. The Niagara Escarpment and Bruce Trail form the southern boundary of the zone and offer unique recreational opportunities and natural areas. The Niagara Parks Commission has a number of parks along the Niagara River. The Department of Environment operates a national historic park and historic site in Niagara-on-the-Lake.

The area is well known as an outstanding fruit growing area. The soils are predominantly Class 1 and 2 with Class 1 soils found mainly adjacent to the Escarpment and Class 2 near Lake Ontario.

Special features located in the zone include sand and gravel pits and rock quarries on the escarpment.

A private industrial waste incinerator is located in St. Catharines; the Port Dalhousie water pollution control plant (St. Catharines) as well as the one in Grimsby handle certain industrial waste; one reclaimer is located in Thorold and one in Niagara Falls.

Federal agricultural research centres are located along Lake Ontario. Provincial properties include over 30 Ontario Hydro surplus sites larger than 25 acres.

The Q.E.W. and rail lines links the zone with Hamilton, Toronto and the rest of southern Ontario. The Welland Ship Canal passes through here, the northern terminus being located at Port Weller.

**Zone 9**

Zone 9 south of the Niagara Escarpment extends to Lake Erie. The main population centres, Niagara Falls and Welland, are positioned in the east along with several smaller centres including Fort Erie and Port Colborne. The urban areas in the western portion are smaller and function as commercial and service centres for their rural hinterland. The eastern centres provide the location for the majority of the zone's manufacturing employment.

Manufacturers in Niagara Falls include finished products industries and chemicals and abrasives industries. Welland's industrial base is dominated by special steel and steel pipe production manufacturers. The main industries in Port Colborne are metal refining and aircraft parts.

Niagara Falls offers 1,400 acres of vacant unserviced land in its industrial parks and Fort Erie, 618 acres. Three hundred acres are available in Wainfleet and Port Colborne.

The population of the main centres represent 54% of the total population and that of the smaller centres, 38%. Thus, the remaining major portion of the zone is low-density urban and rural.

One provincial park is situated on the shore of Lake Erie; conservation areas are found mainly adjacent to Lake Erie and in the central portion of the zone. The Niagara Parks Commission lands follow the Niagara River. A section of the Niagara Escarpment extends southward towards Welland.

Two notable wetland areas are found at Port Maitland on Lake Erie and north of Port Colborne (Humberstone Marsh). A wildlife management area is situated adjacent to the Welland Canal between Port Colborne and Welland.

The soil is identified as Class 2, with some pockets of Class 3, in the area south of the Escarpment. Less fertile soils are found in the west. Truck crops and fruit are grown in the vicinity of Fonthill. Canning crops and the products of general agriculture are found in the west. Dairy and lifestock farms are found here as well.

The Six Nation Indian Reservation is situated southeast of Brantford. Only two sand and gravel pits exist in the zone and these are found on the Escarpment between Welland and St. Catharines. A landfill site receiving inert sludges is situated in Welland. One transfer station which handles liquid wastes is located near Welland.

Government owned land in the zone includes Department of Environment property intended for future institutional or another government use, as well as provincial properties.

The Welland Canal passes through Port Colborne and Welland to Lake Ontario. The eastern area of the zone is linked to Hamilton and Toronto by the Q.E.W. and rail lines.

**Zone 10**

This zone is located northwest of Metro Toronto. It contains the main urban centres of Barrie and Halton Hills where 30% of the population reside. Another 22% live in Caledon, Fergus, Orangeville, Shelburne and Mount Forest. Barrie functions as the main centre for the north portion of the zone. Manufacturing in Barrie is largely metal fabricating or electrical products industries.

The zone is a part of the Toronto commutershed and a significant proportion of the population is employed in Metro Toronto. The west section is oriented more towards Kitchener-Waterloo than it is to Toronto.

The industrial parks of Barrie have 200 acres of available vacant, serviced land. Orangeville's two industrial parks have a total of 300 acres of vacant land.

A large number of conservation areas are located in the east section of the zone near Orangeville and along the Niagara Escarpment. The Escarpment and Bruce Trail pass through the centre of the zone and provide significant natural, geological and recreational opportunities for residents of both the zone and other zones. A wildlife management area is located in the northwest portion of the zone.

Class 1 soils for agriculture are found throughout the zone with the exception of the Escarpment area where sites with severe limitations for agriculture exist. General farming, dairying and livestock raising are the main types of agriculture. The west portion of the Holland Marsh is contained within this zone also; vegetables are grown here.

This zone has one private landfill for industrial wastes located in Halton Hills. Sand and gravel pits are concentrated in the southwest.

The Federal government's Canadian Forces Base Camp Borden, covers a large area in the north. Most provincial properties are devoted to recreational and conservation uses although some surplus Hydro land and vacant land is located in the west.

The zone has a well developed transportation network and is served by Highway 400 in the east and Highway 401 to the south.

**Zone 11**

This zone extends from Highway 400 west to Oakville and north to Brampton. Main urban centres are Metro Toronto and Mississauga. Smaller centres are Brampton and Oakville. The zone is predominantly urban; approximately 98% of the population live in the urban areas. Rural areas are found mainly in the northwest but this area is strongly influenced by urbanization. The zone has a well-diversified industrial base and is a dominant one in southern Ontario.

A large amount of vacant industrial land is available. Mississauga has 2,900 acres, Milton 865 acres and Brampton 720 acres.

Being an urban zone there are few conservation areas. The four in the zone are located in the north. One provincial park is situated in the north-central section. The Parkway Belt West passes in a southwest direction through the centre of the zone and south to Lake Ontario at Oakville.

While Class 1 soils predominate the area, little agricultural activity exists. The farms are located in the north and west where livestock are raised and various crops grown. The west section forms part of the western dairy belt.

This zone contains numerous facilities for the treatment/disposal of wastes. Two sludge farms located in Oakville; six private waste treatment and public water pollution control plants receive certain wastes; a dozen reclaimers are also located here. One landfill (Oakville) receives certain inert sludges.

The sand and gravel pits of the zone are found west of Streetsville.

Atomic Energy of Canada's research centre and the Ontario Research Foundation are found in the zone in the Sheridan Park in Mississauga. The provincial lands in

the zone are used for public institutions, research and development, recreational, conservation area purposes and some Ontario Hydro surplus land is contained here also.

Road and rail transportation is excellent, providing links to southwestern Ontario, Niagara and Montreal.

**Zone 12**

This zone includes the area between Highway 400 and Oshawa, and Lake Ontario north to Richmond Hill and Stouffville. The zone is similar to Zone 11, being predominantly urban. The dominant centre is Metro Toronto; 83% of the zone's population reside here. The remaining population is located in Richmond Hill, Markham, Whitchurch-Stouffville and Vaughan in the north, and Pickering, Ajax, Whitby & Oshawa in the east. The zone has a well-diversified industrial base.

Vacant serviced land is available in the industrial parks of the zone's urban centres. Oshawa offers 325 acres, Ajax 630 acres, Richmond Hill 400 acres, and North York 300 acres.

The zone's provincial park is situated south of Oshawa on Lake Ontario. Conservation areas are concentrated along the Lake and in the northeast. The eastern end of the Parkway Belt extends from Markham in the west to Highway 400.

Two major wetland areas are found adjacent to Lake Ontario in the vicinity of Whitby and Oshawa.

Most farming occurs in the eastern portion of the zone. Orchards and canning crops are grown on the Class 1 soil.

Sand and gravel pits are primarily situated in the east.

This zone has one sludge farm in Scarborough, and water pollution control plants in Pickering and Whitby receiving certain industrial wastes. Reclaimers and reusers are located south of Highway 7 and on Lake Ontario in Metro Toronto.

Excellent transportation facilities are available, linking the zone with the remainder of southern Ontario, northern Ontario and the United States.

Numerous parcels of provincially owned land of 25 acres or more are located in the zone and used for a variety of purposes. Over ten sites are either vacant or Ontario Hydro surplus properties.

**Zone 13**

The zone includes the region between Trenton at the St. Lawrence River in the east, and Lake Simcoe in the west. Newmarket and Aurora function as the main urban centres in the west and Cobourg, in the east. Smaller centres include Newcastle and Port Hope. A total of 47% of the population live in these urban areas.

The cities have a good diversity of industry; smaller centres rely largely on one or two firms. The communities in the west are within the commuting zone of Metro Toronto where many of their residents are employed.

The urban centres of the zone contain a number of industrial parks with vacant serviced land. Holland Landing has 200 acres available, Bradford 135 acres, Newcastle 130 acres, and Colborne 140 acres.

Provincial parks are situated in the southeast on Lake Ontario and on Lake Simcoe in the west. Conservation areas are concentrated in the west. Lake Simcoe and Lake Scugog are the sites for several wildlife management areas. Similarly, major wetland areas are located in the vicinity of Lake Simcoe, Lake Scugog and Rice Lake.

The zone contains two special agricultural areas, the Holland Marsh and the area along Lake Ontario. The Lake Ontario region contains Class 1 soil to Cobourg and Class 2 east of Cobourg. North of the Oak Ridges Moraine are Class 1 and Class 2 soils. The Lake Ontario area is known for its fruit and canning crops as well as tobacco farms. The Holland Marsh area is the site of large vegetable producing farms.

Indian Reserves in the zone are located on islands on Lake Scugog; several others are concentrated adjacent to Rice Lake. Federal government property includes a correctional institution east of Bowmanville, a fish hatchery in the southeast and a penitentiary at Millbrook.

Provincial properties of twenty-five acres or more are used for a variety of purposes while approximately fifteen sites are either vacant or are surplus land owned by Ontario Hydro.

The zone includes an important area for sand and gravel extraction. Pits are concentrated in the Uxbridge area.

The landfill in Hamilton Township receives plastic resin waste.

The zone is well serviced with transportation facilities, particularly the northwestern and southeastern sections which are served by Highway 400 and 401 respectively.

**Zone 14**

The zone is a band of land running northwest from Peterborough and Northumberland Counties through the Kawarthas to Lake Somcoe and Lake Couchiching. The main cities are Orillia and Peterborough, where 47% of the population reside. Another 7.5% reside in the smaller centre of Lindsay. Orillia and Peterborough have fairly diversified manufacturing bases. Machinery manufacturing and metal fabricating industries dominate in Orillia.

Industrial land in the zone is available primarily in the industrial parks of Peterborough which has 265 acres, Lindsay 270 acres, and Washago 400 acres. All land is serviced.

Tourism plays a vital role in the economy of the zone. The Kawartha Lakes and Trent Waterway are important recreation areas. Several provincial parks are found within the zone; they are located on Georgian Bay near Waubaushene, in the vicinity of Lake Simcoe, and near Peterborough and Lindsay. Conservation areas are concentrated north of Peterborough.

Major wetland areas are situated on Rice Lake and the Trent Waterway. A wildlife management area is located on Georgian Bay.

A mix of soil classes are found throughout the zone. Areas of Class 1 soils extend from south of the Kawartha Lakes and west to Lake Simcoe. Mixed farming predominates. Soils in the Kawartha Lakes region are poorer in agricultural capability and the land is used primarily for livestock raising.

Special features include numerous Indian Reserves. Several are situated just east of Lake Couchiching and others between Lindsay and Peterborough. Concentrations of sand and gravel pits are found west of Lake Couchiching and Lake Simcoe as well as in the Lakefield area.

The Peterborough water pollution control plant handles inert industrial sludges.

Some land in the zone is surplus Ontario Hydro property, while most other provincial lands are used for recreation and conservation.

Road and rail transportation facilities are not as highly developed as in other zones and are generally widely spaced. Highway 7 is the main east-west road corridor.

**Zone 15**

This zone extends from Trenton in the west to Gananoque in the east, and from Lake Ontario north to the Canadian Shield. The main urban centres are Belleville, Kingston and Trenton with 46% of the total population. The smaller centres of Picton and Napanee contain another 35% of the zone's population. Most of the urban areas are located in the corridor along Highway 401 and the St. Lawrence River and along Highway 7. Well over half of the residents live in villages and rural townships.

The manufacturing industries of the zone are located predominantly in the main urban centres; generally, manufacturing is mixed with some emphasis on food and beverages. The localized needs are served by the smaller communities of Picton and Napanee.

Industrial parks in this zone have 2,100 acres of vacant serviced land. Belleville has 235 acres, Picton 550 acres, Trenton 312 acres and Kingston 530 acres of land.

Several provincial parks are located along Lake Ontario including Sandbanks Provincial Park which is noted for its extensive sand dunes and sand bars. The National historic site of Fort Henry is situated at Kingston.

Two wildlife areas are located in the zone; one is found north of Napanee and the other south of Picton on Lake Ontario. Major wetland areas are concentrated in the southwest portion of the zone. A significant number of large forests are concentrated in the east and west section.

Dairy and livestock, fruit and vegetable farms are situated in the zone. Some south portions have a limited capability for agriculture due to shallow soils.

Special features in the area include an Indian Reserve east of Belleville on the Bay of Quinte and sand and gravel pits in the suth and in the vicinity of Trenton and Kingston. The water pollution control plants located at Belleville and Gananoque receive certain industrial wastes.

Provincial government properties in the zone are used for a variety of purposes including parks and recreation research and development and public institutions. Several Ontario Hydro surplus lands are found in the zone. Federal government land includes the Trenton Canadian Forces Base.

This zone consists of the area in the vicinity of Ottawa south to Highway 43 and north along the Ottawa River to Petawawa. The main city dominating the area is Ottawa, including the surrounding communities of Napean and Gloucester. Smaller centres are Vanier and Kanata in the Ottawa area and Renfrew and Pembroke in the northwestern section. Most urban development has been concentrated in the vicinity of Ottawa where 80% of the population resides and to a lesser degree, north along Highway 17 and the Ottawa River, with 4.5% of the population. Ottawa ranks first in influence; manufacturing is concentrated here with the dominant industries being electronic and computer component manufacturers. Elsewhere, manufacturing is mixed with some emphasis on food and beverages.

Service industries are located mainly in the larger centres. The public sector is the zone's largest employer and is concentrated in Ottawa and in Petawawa where a Canadian Forces Base is located.

The Ottawa area has 2,100 acres of vacant serviced land available in a number of industrial parks. Renfrew's industrial parks have 400 acres of vacant serviced land.

One provincial park is located on the Ottawa River, northwest of Ottawa. The historic waterway of the Rideau Canal and its associated parks are important recreational areas in the zone.

Two major wetlands are situated in the zone, one northeast of Smiths Falls, and the other east of Ottawa.

This is a mixed farming and dairying area, particularly in the area north of Ottawa along the Ottawa River. Generally, Class 2 and 3 soils are situated along the River between Arnprior and Petawawa. Some pockets of Class 1 and 2 soil are found south of Ottawa. Soils in the southwest are largely limited in their agricultural capability.

A major concentration of Federally owned properties are in the zone. In addition to the Canadian Forces Base of Camp Petawawa, several military properties are situated to the south of Pembroke. East of Arnprior is Atomic Energy of Canada owned land used for research and development.

The Department of National Defence owns properties used for military purposes and research development anlong the Ottawa River west of Ottawa, south of Nepean, and east of Vanier. Land used for research and development by the Department of Agriculture is situated south of Nepean. The Department of the Environment has property at the southwestern boundary of the zone intended for a future institutional and government use. Properties owned by the provincial government in the zone include Ontario Hydro surplus land.

Sand and gravel pits are concentrated south of Ottawa, west of Kanata, north of Renfrew and east of Arnprior.

The zone is linked to Quebec by Highway 17 and 417 and to 401 and in southwestern Ontario by several north-south highways.

**Zone 17**

Zone 17 consists of the extreme eastern part of Ontario. It contains one Major centre, Cornwall and the smaller centres of Brockville, Smiths Falls, Perth and Hawkesbury. Main urban development has been concentrated along Highway 401, 17, 417 and 43; the rest of the zone is essentially untouched by urban development.

The population of Cornwall represents 19% of the zone's population. The smaller centres contain 18% of the population.

The urban centres serve their surrounding areas. The more specialized services and facilities are provided by centres outside the zone including Kingston, Ottawa and Montreal. Manufacturing is concentrated in Cornwall and Brockville. Chemical manufacturers dominate in Cornwall; in other areas, manufacturing is mixed. Manufacturing employs a smaller proportion of the work force than in other zones of Southern Ontario.

Industrial parks in the Brockville area have 550 acres of vacant serviced land; Perth has 160 acres, Cornwall 1,228 acres and Hawkesbury 150 acres available.

Provincial parks of the zone are situated on the Ottawa River and Rideau Waterway Parks under the authority of the St. Lawrence Parks Commission are located along the St. Lawrence River. The Rideau Waterway is another major attraction. Wildlife management areas are found along the St. Lawrence River and in the central part of the zone. Wetland areas of significance are located north of Brockville. Another major wetland is in the northeast section of the zone.

The eastern dairying area and St. Lawrence Lowland farming areas are found in the zone. Corn and beef cattle raising are dominant in the St. Lawrence area.

Special features include an Indian Reservation near Cornwall. One transfer station for industrial waste is located at Brockville. Government land is located south of

Smiths Falls and used for communications, and another site used for a public institution is situated near Cornwall. Provincial properties are primarily used for conservation and recreation purposes.

Major transportation corridors parallel the St. Lawrence and Ottawa rivers and networks of roads and rails adequately serve the rest of the zone. Port facilities are located at urban centres along the St. Lawrence.

**Zone 18**

The area north of the southern edge of the Canadian Shield forms Zone 18. Relative to the other zones, this is a sparsely populated area. The largest centres and the Towns of Huntsville, Parry Sound, Bracebridge, and Gravenhurst which are situated in the west. Bancroft in the central area and Gananoque in the far southwest section are two smaller centres. These urban areas contain 21% of the population; most residents live in small villages or rural townships. The urban centres serve their surrounding ares but residents must travel to larger centres outside the zone for a wider range of services and facilities. The towns of the zone do not have broad industrial bases. In the western towns the wood and wood products industry is dominant. The chemical industry, food and beverage plants and non-metallic mineral establishments account for the remaining manufacturing employment.

The industrial park in Parry Sound has 250 acres of vacant serviced land available and Haliburton has 200 acres of land. Three hundred acres of vacant serviced land are available in several industrial parks in Gananoque.

Tourism is an important industry to the zone. A major portion of the Shield zone is occupied by Algonquin Park; several other provincial parks are situated in the east and in the vicinity of Parry Sound and Huntsville. The Georgian Bay Islands National Park is located in the west and the Thousand Islands in the southeast. The Haliburton Highlands and Muskoka are well-known as recreation areas.

Little agriculture occurs in the zone. The soil has severe limitations, being primarily rocky and shallow in nature. Some dairy and beef farms can be found as

well as cranberry farms, but generally are marginal. Soils are classified as predominantly Class 7 by the CLI.

Numerous Indian Reserves are situated along Georgian Bay. Another reserve is south of Algonquin Park. Relatively few sand and gravel pits are operated in the zone; those which do exist are concentrated in the west. Road and rail transportation facilities are not as developed as those in other zones. The western portion is linked to southern centres by Highway 69 and 11.

The province owns numerous properties of 25 acres or more in the zone of which approximately 70 are either vacant and Ontario Hydro surplus land and another 70 used for recreation, parkland or conservation purposes. Federal land includes a penitentiary and correctional centre near Gravenhurst and Bracebridge respectively and National Defence land south of Algonquin Park and near Parry Sound.

## 6.0 LAND USE ISSUES

The land use information base forms an essential input for the site selection procedure and the evaluation of impact on an area by a proposed facility. In carrying out this procedure and evaluation a number of issues will have to be addressed. Some of these may be very complex and others may be simple depending upon the land use context surrounding the particular facility in question.

It may be anticipated that the following kinds of issues and questions will arise.

Land Use Siting Context

- Should a facility be in an established industrial area?
- Should a facility be removed from existing development?
- Is there a preferred land use pattern where a facility would function best?
- Should the potentials of job creation, industrial stimulation, etc., influence siting?
- How large should the buffer zone be around the facility?

Land Use Inpacts

- Should there be incentive for location?
- What levels of impact should be tolerated (in light of public reaction)?
- What are the consequences for housing, facilities, services, etc.?
- Should there be any form of underwriting by OWMC for later unforeseen adverse impacts?

- What kind of uses should not be impacted at all?

- What uses may be impacted and what mitigative measures are reasonable?

TABLE 1

PARKS AND AREAS OF
PROVINCIAL SIGNIFICANCE

| ZONE | NUMBER OF PROVINCIAL PARKS | NUMBER OF NATIONAL PARKS(1) | NUMBER OF CONSERVATION AREAS | AREAS OF PROVINCIAL SIGNIFICANCE |
|---|---|---|---|---|
| 1 | 8 | - | 16 | 21 |
| 2 | 2 | - | 14 | 22 |
| 3 | 4 | - | 19 | 12 |
| 4 | 1 | - | 18 | 27 |
| 5 | 9 | 1 | 32 | 45 |
| 6 | - | - | 15 | 16 |
| 7 | 1 | - | 20 | 9 |
| 8 | - | - | 3 | 6 |
| 9 | 2 | - | 6 | 22 |
| 10 | 2 | - | 16 | 25 |
| 11 | - | - | 8 | 8 |
| 12 | 1 | - | 11 | 7 |
| 13 | 3 | 1 | 35 | 14 |
| 14 | 8 | 1 | 9 | 28 |
| 15 | 6 | 1 | 26 | 24 |
| 16 | 2 | 1 | 4 | 20 |
| 17 | 2 | 1 | 2 | 13 |
| 18 | 19 | 4 | 23 | 38 |

(1) Includes the Trent - Severn Waterway & Rideau Canal

TABLE 2

WILDLIFE MANAGMENT & MAJOR WETLAND AREAS

| ZONE | NUMBER OF WILDLIFE MANAGEMENT AREAS | NUMBER OF MAJOR WETLAND AREAS |
|---|---|---|
| 1 | 3 | 4 |
| 2 | - | - |
| 3 | 6 | 1 |
| 4 | 1 | - |
| 5 | 5 | 6 |
| 6 | 3 | - |
| 7 | 3 | 2 |
| 8 | - | - |
| 9 | 2 | 2 |
| 10 | 2 | 1 |
| 11 | - | - |
| 12 | 1 | 1 |
| 13 | 6 | 4 |
| 14 | 2 | 1 |
| 15 | 2 | 1 |
| 16 | - | 1 |
| 17 | 3 | 2 |
| 18 | 1 | 1 |

TABLE 3

AIRPORTS & AIRFIELDS

| ZONE | TOTAL NUMBER OF AIRPORTS & AIRFIELDS | NUMBER OF FEDERAL AIRPORTS | NUMBER OF MUNICIPAL AIRPORTS |
|---|---|---|---|
| 1 | 19 | 1 | 3 |
| 2 | 22 | 1 | - |
| 3 | 8 | - | 2 |
| 4 | 15 | - | 1 |
| 5 | 30 | 1 | 5 |
| 6 | 11 | - | 2 |
| 7 | 5 | - | 1 |
| 8 | 3 | - | 1 |
| 9 | 9 | - | 1 |
| 10 | 21 | 1 (1) | - |
| 11 | 2 | 1 | - |
| 12 | 5 | 1 (1) | 1 |
| 13 | 9 | - | - |
| 14 | 7 | - | 2 |
| 15 | 9 | 2 (1) | 1 |
| 16 | 7 | 2 (1) | 3 |
| 17 | 22 | - | 3 |
| 18 | 15 | 1 | 5 |

(1) Includes Federal & Canadian Forces Base Airports

TABLE 4

GOVERNMENT PROPERTIES
AND INDIAN RESERVATIONS

| ZONE | DEPARTMENT OF NATIONAL DEFENCE PROPERTIES | ONTARIO HYDRO VACANT PROPERTIES (25 AC+) | INDIAN RESERVATIONS | ONTARIO LAND CORPORATION PROPERTIES |
|---|---|---|---|---|
| 1 | 2 | 2 | 4 | 1 |
| 2 | 1 | 1 | 1 | - |
| 3 | - | 4 | - | - |
| 4 | - | 2 | - | - |
| 5 | 2 | 2 | 4 | - |
| 6 | - | 4 | - | 2 |
| 7 | - | 8 | - | 2 |
| 8 | 2 | 12 | - | - |
| 9 | - | 15 | 1 | 2 |
| 10 | 3 | 12 | - | - |
| 11 | - | 9 | - | 1 |
| 12 | - | - | - | 2 |
| 13 | - | 8 | 6 | 2 |
| 14 | - | - | 4 | 1 |
| 15 | 5 | 6 | 1 | 2 |
| 16 | 26 | 19 | - | 1 |
| 17 | 3 | 56 | 1 | - |
| 18 | - | 27 | 9 | - |

TABLE 5
PROPERTIES OWNED BY THE PROVINCE
OF ONTARIO WITHIN THE STUDY AREA

- 25 AC (10-12 HA) OR GREATER*

| | PREDOMINANT USE | ALGOMA | BRANT | BRUCE | DUFFERIN | DURHAM | ELGIN | ESSEX | FRONTENAC | GREY | HALDIMAND NORFOLK | HALIBURTON | HALTON | HAMILTON-WENTWORTH | HASTINGS | HURON | KENT | LAMBTON | LANARK | LEEDS & GRENVILLE | LENNOX & ADDINGTON | METRO TORONTO | MIDDLESEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103 | Res'l Medium Density | | | | | | | | | | 1 | | | | | | | | | | | | |
| 106 | Commercial Office | | | | | | | | 1 | | | 1 | 1 | | 1 | | | | | | | 1 | 1 |
| 120 | Agriculture | | | 1 | | | | | 1 | | 1 | 2 | 1 | | 5 | | | | 1 | 5 | | | |
| 141 | Industrial Light | | | | | | | | | | | | | | | | | | | | | | |
| 201 | Future Residential | | | | | | | | | | 2 | | | | | | | | | | | | |
| 210 | Parkland & Recreational Uses | | | 1 | | 1 | | | | 1 | 1 | | 1 | | | | | | 1 | 15 | 2 | | |
| 215 | Park | | | 12 | 3 | 2 | 2 | 2 | 3 | 5 | 4 | 1 | 1 | | 1 | 2 | 2 | 2 | 2 | 2 | 1 | | 1 |
| 230 | Historic Sites | | | | | | | | | | | | | | | | | | | 1 | | | |
| 245 | Community Pasture & Conservation Areas | | | 3 | 1 | 4 | 5 | 2 | 2 | 1 | 2 | 6 | 1 | 1 | 2 | 1 | 1 | | | 14 | 3 | | |
| 300 | Institutions - Public | | 2 | | | 4 | 1 | | 2 | | 1 | 2 | 2 | 1 | 1 | 1 | 2 | | 1 | | 1 | 3 | 2 |
| 700 | Transportation Including Aids | | | | | | | | 1 | | | | | 1 | | | | | | 1 | | | |
| 800 | Harbours & Shoreline Installations | | | 1 | 1 | | | 1 | 2 | | 2 | 1 | | | | | | | 2 | 4 | 2 | | |
| 900 | Research & Development | | | | | | | | | | 1 | | | | | | | | | | | 1 | 1 |
| | Ontario Hydro (Surplus Land only) | | 1 | 1 | | 2 | | 1 | 3 | 1 | 4 | | 11 | | 13 | 1 | 2 | 2 | | | | 3 | |
| | Ontario Land Corp. | | 1 | | | 6 | | 1 | 1 | | 2 | | 2 | 1 | 1 | | | | | | | | |
| | Public Utility | | | 1 | | 1 | 2 | 4 | | | 1 | | | | 1 | 1 | 4 | 1 | | | | | 2 |
| | Vacant | | 1 | 1 | | 1 | | | | | | | | 1 | 1 | | | | | | | 1 | |
| | Unknown | | | | | | | | | | | | | | | | | | | | | | |
| | TOTALS | 0 | 5 | 21 | 5 | 21 | 10 | 11 | 15 | 8 | 22 | 13 | 20 | 5 | 26 | 6 | 11 | 5 | 7 | 42 | 9 | 9 | 7 |

TABLE 5
PROPERTIES OWNED BY THE PROVINCE
OF ONTARIO WITHIN THE STUDY AREA

- 25 AC (10-12 HA) OR GREATER*

| | | MUSKOKA | NIAGARA | NIPISSING | NORTH-UMBERLAND | OTTAWA-CARLETON | OXFORD | PARRY SOUND | PEEL | PERTH | PETERBOROUGH | PRESCOTT & RUSSELL | PRINCE EDWARD | RENFREW | SIMCOE | STORMONT, DUNDAS & GLENGARY | SUDBURY | TIMISKAMING | VICTORIA | WATERLOO | WELLINGTON | YORK | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103 | Res'l Medium Density | | | | | | | | | | | | | | | | | | | | | | 1 |
| 106 | Commercial Office | | | 1 | | | | 1 | | | | | | | | | 1 | 1 | 2 | | | | 12 |
| 120 | Agriculture | 8 | | 4 | | | | 14 | | | 1 | | | 11 | 7 | | 5 | 4 | 3 | | 1 | | 75 |
| 141 | Industrial Light | | | | | | | | | | | | | 1 | 1 | | 1 | | | | | | 3 |
| 201 | Future Residential | | | | | | | | | | | | | | | | | | | | | | 2 |
| 210 | Parkland & Recreational Uses | | | 1 | | | 2 | 1 | 2 | | 1 | 1 | | | | 11 | | | 1 | 3 | 1 | | 47 |
| 215 | Park | 4 | 1 | 7 | 2 | | 1 | 3 | | | 6 | 1 | 4 | 5 | 10 | 1 | 12 | 3 | 2 | | | 1 | 111 |
| 230 | Historic Sites | | | | | | | | | | 1 | | | | 2 | | | | | | | | 4 |
| 245 | Community Pasture & Conservation Areas | 3 | 1 | 4 | 6 | | 1 | 2 | | | 3 | 2 | 2 | 6 | 10 | 3 | | 8 | 2 | | 1 | 4 | 107 |
| 300 | Institutions - Public | 2 | 1 | 2 | 1 | 2 | 1 | | 3 | | 1 | | 1 | | 8 | | 2 | 2 | | 1 | 2 | 1 | 55 |
| 700 | Transportation Including Aids | | | | | 2 | | | 1 | | 1 | | | | 2 | | | | | 1 | | | 10 |
| 800 | Harbours & Shoreline Installations | 3 | | 1 | 1 | 1 | | 3 | | | 1 | | | 3 | | | | 3 | 1 | | | | 33 |
| 900 | Research & Development | | 1 | | | | | | | | | | | | 1 | 1 | | | | 1 | 3 | 1 | 11 |
| | Ontario Hydro (Surplus Land only) | | 34 | 5 | 6 | 3 | 1 | 2 | | 2 | | | | 48 | 70 | | | | 1 | 1 | 4 | 1 | 229 |
| | Ontario Land Corp. | | | | 3 | 1 | | | | | 2 | | | | | | 1 | | | 1 | | | 23 |
| | Public Utility | | | | | 1 | | | | | | 1 | | 1 | 1 | 1 | 1 | 1 | | | 1 | | 26 |
| | Vacant | 1 | | | | | | | | | | | | 1 | 3 | | 1 | 2 | | 1 | 1 | 1 | 20 |
| | Unknown | | | | | | | 1 | | | | | | | | | | | | | | | 1 |
| | TOTALS | 21 | 38 | 25 | 19 | 10 | 6 | 27 | 6 | 2 | 17 | 5 | 7 | 76 | 115 | 17 | 24 | 24 | 12 | 8 | 14 | 15 | 770 |

TABLE 6

SAND AND GRAVEL PITS

| ZONE | NUMBER OF SAND AND GRAVEL PITS |
|---|---|
| 1 | 33 |
| 2 | 31 |
| 3 | 13 |
| 4 | 9 |
| 5 | 17 |
| 6 | 20 |
| 7 | 1 |
| 8 | - |
| 9 | - |
| 10 | 8 |
| 11 | - |
| 12 | 1 |
| 13 | 33 |
| 14 | 10 |
| 15 | 11 |
| 16 | 8 |
| 17 | - |
| 18 | 17 |

## TABLE 7

## INDUSTRIAL PARKS

| Zone | Number | Amount of Vacant Land (Acres) | Location of Major Concentration of Vacant Industrial Land |
|---|---|---|---|
| 1 | 44 m | 9,808 | - Sarnia - 7,100 ac.<br>- Windsor - 1,700 ac. |
| 2 | 26 | 1,700 | - Strathroy - 775 ac.<br>- Woodstock - 575 ac. |
| 3 | 6 m | 732 | - St. Thomas - 250 ac.<br>- Nanticoke - 180 ac. |
| 4 | 16 m | 1,500 | - Goderich - 790 ac.<br>- Stratford - 132 ac. |
| 5 | 9 m | 2,045 | - Owen Sound - 1,100 ac; Midland - 222 ac.<br>- Wasaga Beach - 327 ac; Walkerton - 200 ac. |
| 6 | 20 | 1,700 | - Guelph - 420 ac; Cambridge - 464 ac.<br>- Brantford - 408 ac. |
| 7 | 18 m | 3,335.5 | - Burlington - 402.5 ac.<br>- Hamilton - 2,933 ac. |
| 8 | 12 | 3,485 | - St. Catharines-Thorold - 2,800 ac.<br>- Niagara-on-the-Lake - 521 ac. |
| 9 | 19 m | 2,793 | - Fort Erie - 618 ac; Wainfleet - 300 ac.<br>- Niagara Falls - 1,400 ac; Port Colborne - 300 ac. |
| 10 | 16 | 633 | - Orangeville - 300 ac.<br>- Barrie - 218 ac. |
| 11 | 38 m | 4,630 | - Mississauga - 2,900 ac.<br>- Milton - 865 ac; Brampton - 719 ac. |
| 12 | 14 m | 2,140 | - Oshawa - 325 ac; North York - 300 ac.<br>- Ajax - 630 ac; Richmond Hill - 400 ac. |
| 13 | 26 m | 1,237 | - Holland Landing - 200 ac; Newcastle - 130 ac.<br>- Bradford - 135 ac; Colborne - 140 ac. |
| 14 | 11 m | 1,206 | - Peterborough - 265 ac; Washago - 400 ac.<br>- Lindsay - 270 ac. |
| 15 | 11 m | 2,100 | - Belleville - 235 ac;<br>- Picton - 550 ac; Kingston - 530 ac. |
| 16 | 23 m | 2,829 | - Brockville - 550 ac; Cornwall - 2,473 ac.<br>- Perth - 160 ac; Hawkesbury - 150 ac. |
| 17 | 20 m | 2,427 | - Brockville - 550 ac; Cornwall - 2,473 ac.<br>- Perth - 160 ac; Hawkesbury - 150 ac. |
| 18 | 12 m | 1,099 | - Parry Sound - 250 ac.<br>- Haliburton - 200 ac; Gananoque - 300 ac. |

m - Multiple Sites, number unknown

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Map 11 Area "C" Reference Map
Map 21 Area "D" Reference Map
Map 31 Area "E" Reference Map
Map 43 Area "F" Reference Map

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SAULT STE. MARIE
NORTH BAY
HUNTSVILLE
GEORGIAN BAY
LAKE HURON
OWEN SOUND
BARRIE
LINDSAY
PETERBOROUGH
BELLEVILLE
KINGSTON
BROCKVILLE
CORNWALL
OTTAWA
BRAMPTON
TORONTO
MISSISSAUGA
LAKE ONTARIO
GUELPH
KITCHENER
STRATHROY
HAMILTON
ST. CATHARINES
BRANTFORD
WELLAND
SARNIA
LONDON
ST. THOMAS
CHATHAM
WINDSOR
LAKE ERIE
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18
SOUTHERN ONTARIO
0 20 40 MILES
ZONES

POOR

QUALITY

ORIGINAL